C4-046-73082
8.1

SAMPLING AND ANALYSIS PLAN
COMANCHE CONSTRUCTION SITE
OLATHE, JOHNSON COUNTY, KANSAS

A: FIELD SAMPLING PLAN

I. Introduction

This Field Sampling Plan (FSP) outlines activities proposed for an Integrated Assessment (IA) at the Comanche Construction site at 16510 West 119th Street in Lenexa, Johnson County, Kansas. The IA will be performed under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA). The SE will provide initial information to assess the threat to human health and the environment at the site consistent with §300 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The Kansas Department of Health and Environment (KDHE) will conduct all of the fieldwork and project management. The site is located near the intersection of Renner Boulevard and West 119th Street in Olathe, Johnson County, Kansas.

II. Site Background

The site was identified originally in 2013 when a KDHE Northeast District Office inspection identified several piles of drums and waste at the site.

III. Ground Water Sampling

Eight to ten temporary monitoring wells will be installed and sampled. Three well volumes will be attempted with a check valve and disposable tubing. dedidcated bailer, and samples will be obtained volatile organic compounds (VOCs) by EPA Method 8260, total petroleum hydrocarbons (TPH) by Methods OA-1 and OA-2. Water samples will be submitted to KDHE and/or Pace or ALS Laboratories for analysis. Water sampling will be consistent with KDHE BER Standard Operating Procedure (SOP) *BER-01, Collection of Ground Water Samples.* Purge water will be disposed on-site as a minimal volume (less than one gallon per well) will be generated.

IV. Subsurface Soil Sampling

A maximum of 12 sampling locations are proposed on the Comanche Construction site. A Macrocore sampler will be used to obtain soil samples from a 0-5 and 5-10 foot interval. These intervals were chosen as bedrock is generally 10-12 feet below surface in the site area. Macrocores will be screened with a MiniRAE photoionization detector (PID) and a minimum of three laboratory samples submitted for VOCs, TPH, and Resource Conservation and Recovery Act (RCRA) metals analysis by EPA Methods 6010 and 7471. Soil sampling will be consistent with SOP *BER-03, Soil Sampling for Laboratory Analysis.* Since direct-push technology will be used to advance the borings, no cuttings will be generated. All boreholes will be abandoned from surface to total depth with granular bentonite and the surface restored.

V. Decontamination

Sampling equipment will be decontaminated as needed throughout the project as described in KDHE BER SOP *BER-05, Decontamination of Equipment*. Decontamination will consist of thoroughly cleaning with warm soapy water, followed by a rinse with water. The equipment will then be triple rinsed with de-ionized water and allowed to air-dry. A trip blank and blind duplicate will also be collected for VOCs and metals analysis for quality control purposes.

VI. Investigation Derived Waste

No cuttings will be generated. Disposable sampling gloves, sample liners, and polyethylene tubing will be bagged and disposed properly by KDHE personnel. Purge water will be held in KDHE's secure lot at Forbes Field pending return of analytical results. Purge water will be disposed of either on-site if analytical data indicates it appropriate, an approved publicly owned treatment works (POTW) or professional waste oil/disposal contractor pending analytical results and consideration of disposal options. Purge water will be disposed of within 90 days of receipt of analytical results.

VII. Schedule

Fieldwork is projected for completion in August. Final report submission is contingent on laboratory turnaround, but is expected by September 30, 2012.

B: ATTACHMENTS

1. **Field Sampling Plan Figures**
2. **Health and Safety Plan and Attachments**
3. **Site-Specific Quality Assurance Project Plan Addendum**

Kansas

Robert Moser, MD, Secretary | Department of Health & Environment | Sam Brownback, Governor

Bureau of Environmental Remediation
Site-Specific Health and Safety Plan

This health and safety plan must be read by all persons working at the site. Any health or safety concerns should be brought to the attention of the site safety officer or site manager immediately.

SITE NAME:	**Comanche Construction Site**
Date(s) of Field Activities:	**February-March 2014**
KDHE Personnel on Site:	**Responsibilities:**
Randy Brown, P.G.	**Project Manager**
Michael Costlow	**Geoprobe Operator, Driller**
Brian D'Alfonso	**Field Support**

Brief Description of Project Objectives:
Soil and groundwater sampling in a storage lot for a construction company
Brief Description of Site (topography, setting, etc.):
Commercial area of Lenexa, Kansas.
Brief History of Site:
Complaint of 2013 regarding potential hazardous waste stored and disposed on-site.
Non-chemical physical hazards:
As with all hazardous materials sites, the primary physical hazards are slips, trips and falls.
Cold-Related Problems:
Hypothermia: A loss of body temperature. Occurs when body temperature falls below 95°F. Hypothermia can occur anytime ambient temperature is below 70°F. **Prevention:** Dress in layers, including footwear, avoiding cotton clothing, which absorbs moisture; keep head covered; drink plenty of water; eat high energy foods.
Symptoms: Excessive shivering, weakness, slowed heart rate, drowsiness, confusion, difficulty speaking, pale complexion. **First Aid: CALL 911.** Remove any wet clothing; cover with warm, dry clothing; move to warm room or vehicle; Gradually warm victim; give warm, not hot, liquids.
Heat-Related Problems: These are all manifestations of dehydration caused by excessive sweating.
Heat Stress: Ranges from mild heat cramps to heat exhaustion to life threatening heat stroke.
Prevention: Drink plenty of liquids, especially water, avoid caffeine. Take frequent breaks in a cool place out of the sun.

Symptoms: Heat cramps are characterized by muscle cramps; heat exhaustion is character-ized by dizziness, fainting, but the victim can still sweat and maintains a normal body temperature; heat stroke includes the symptoms of heat exhaustion *and* severe confusion or delirium, elevated temperature and lack of sweating.
First Aid: CALL 911 if heat stroke is suspected. Remove victim to cool, shady place; if conscious, give cool water; cool skin with cool or cold, wet towels; have victim lie down with feet raised.

Known Chemical Hazards (attach ToxFax, if available): None known; lead, arsenic, zinc and cadmium potential hazards.

Chemical Name	Uses	Exposure Symptoms	

Exposure Potential:	Low:	X	Medium:		High:	
Level of Protection:	Modified level D					

**** The level of protection may be upgraded by the HSO or project manager if site conditions change. ****

Other Precautions: (incl*uding equipment or special training requirements, precautions around drill rigs or other heavy equipment, special site conditions, specific operator concerns, radiological concerns, etc.):*

Emergency Contact Information:

Police:	**911**
Ambulance:	**911**
Fire:	**911**
Hospital:	**Shawnee Mission Urgent Care (Map attached)**
Poison Control:	**911**
Utilities:	**Surficial sampling (no utility clearance needed)**
Directions to Hospital:	**See map and driving directions (attached)**

Approval of Health and Safety Plan

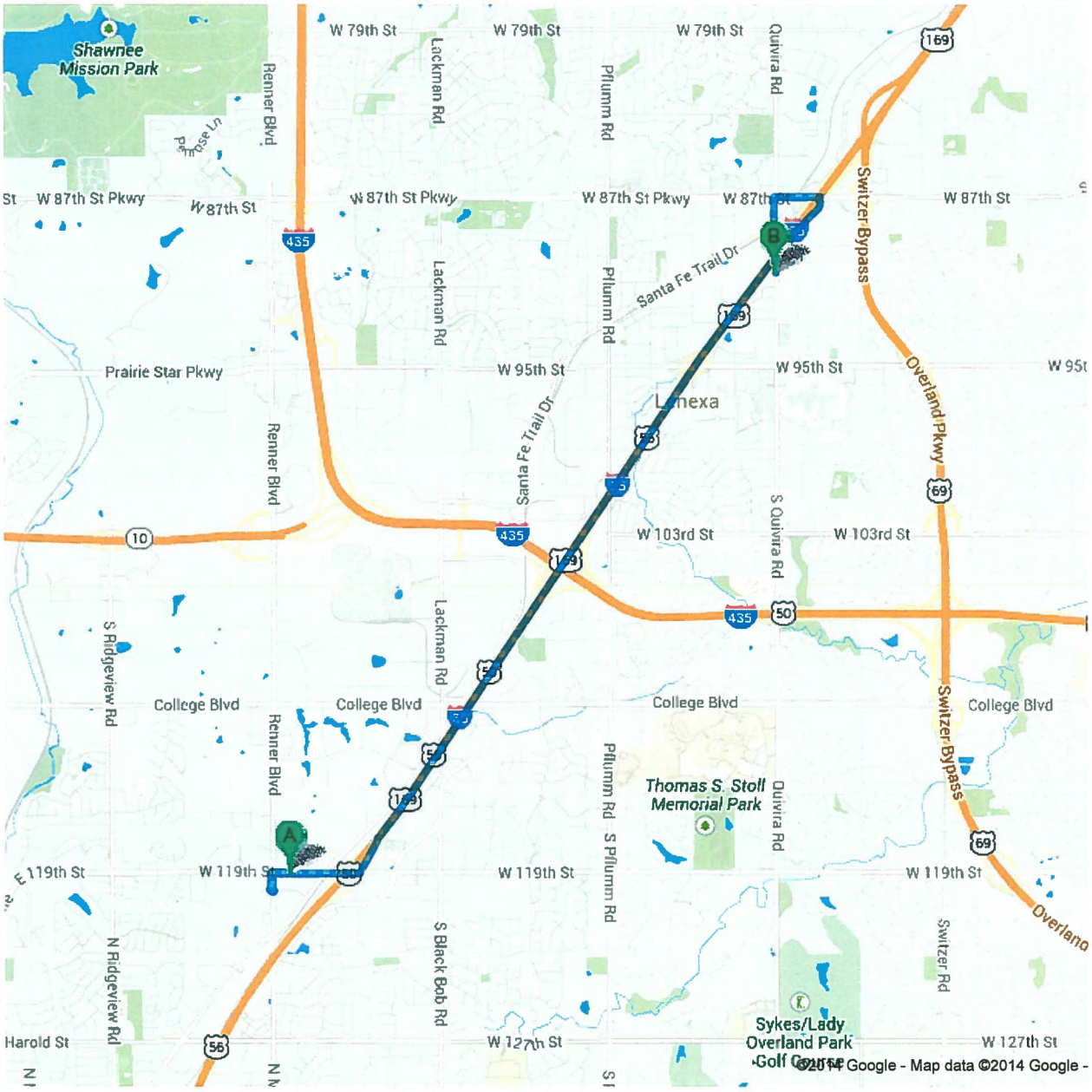
Project Manager: **Date:**

Unit Chief or Direct Supervisor: **Date:**

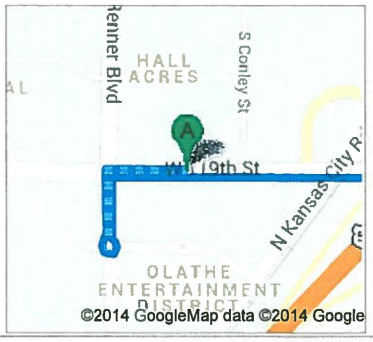
On-site Signatures/Acknodwledgement of Health and Safety Plan at Work Location *(to be signed by all personnel working on-site):*	
Personnel Name (printed): Randy Brown, L.G.	**Agency / Title:** KDHE / Project Manager
Signed:	**Date:**
Personnel Name (printed): Mike Costlow	**Agency / Title:** KDHE/Environmental Technician IV
Signed:	**Date:**
Personnel Name (printed):	**Agency / Title:**
Signed:	**Date:**
Personnel Name (printed):	**Agency / Title:**
Signed:	**Date:**
Personnel Name (printed):	**Agency / Title:**
Signed:	**Date:**
Personnel Name (printed):	**Agency / Title:**
Signed:	**Date:**

Google

Directions to Shawnee Mission Urgent Care
9040 Quivira Rd, Lenexa, KS 66215
6.5 mi – about **9 mins**



16510 W 119th St, Olathe, KS 66061



1. Head **west** on **W 119th St** toward **Renner Blvd**

go 0.1 mi
total 0.1 mi

2. Take the 1st left onto **Renner Blvd**

go 0.1 mi
total 0.2 mi

3. At the traffic circle, take the **4th** exit and stay on **Renner Blvd**

go 0.1 mi
total 0.4 mi

4. Turn right onto **W 119th St**
About 52 secs

go 0.5 mi
total 0.9 mi

5. Turn left to merge onto **I-35 N** toward **Des Moines**
About 5 mins

go 4.5 mi
total 5.3 mi

6. Take exit **225A-225C** toward **87th Street Pkwy/75th Street**

go 0.2 mi
total 5.5 mi

7. Take exit **225A** for **87th St Pkwy**

go 0.2 mi
total 5.7 mi

8. Keep left at the fork, follow signs for **87th Street Parkway**

go 299 ft
total 5.8 mi

9. Turn right toward **W 87th St/W 87th St Pkwy**

go 95 ft
total 5.8 mi

10. Turn left onto **W 87th St/W 87th St Pkwy**
About 2 mins

go 0.3 mi
total 6.1 mi

11. Take the 1st left onto **Quivira Rd**

go 249 ft
total 6.1 mi

12. Slight left to stay on **Quivira Rd**
Destination will be on the right

go 0.4 mi
total 6.5 mi

Shawnee Mission Urgent Care
9040 Quivira Rd, Lenexa, KS 66215

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Map data ©2014 Google

Directions weren't right? Please find your route on maps.google.com and click "Report a problem" at the bottom left.

CONSENT FOR ACCESS TO PROPERTY

The person signing below gives permission to the Kansas Department of Health and Environment (KDHE) to enter onto the property described below for the purpose of conducting an environmental investigation on the property and to take soil, groundwater, waste and surface water samples of duration not to exceed 30 days from the signature date of this access agreement. KDHE will incur all costs for the investigation including analytical costs, equipment costs such as drill rig, field personnel, and associated expenses.

Permission is granted to KDHE, and to its employees, agents, assigns, or contractors to enter this property in order to carry out the above activities pursuant to K.S.A. 65-3453 *et seq.*

This permission is being granted by or on behalf of the (circle one):

- Owner
- Tenant

of this property.

KDHE has assured the person signing below that upon completion of the work specified above, KDHE materials and equipment will be removed from the property and the property restored as nearly as reasonably possible to the condition it was in at the time KDHE began work at the Site.

ACCESS IS GRANTED FOR:

Business Operations Are Shut Down Until 3/1/14

Comanche Construction, Inc.
16510 W. 119th Street
Olathe, Kansas 66061

2/28/14
Date

Leland Wilkerson
Signature

Leland Wilkerson
Print name of person signing

Comanche Const. Inc.
(Company name, if applicable)

Sec-Treas.
(Title, if signing for a business)

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
BUREAU OF ENVIRONMENTAL REMEDIATION
SITE ASSESSMENT PROGRAM/
SITE-SPECIFIC QUALITY ASSURANCE PROJECT PLAN ADDENDUM (SSQA)

I. SITE NAME AND LOCATION:

NAME: Comanche Construction

ADDRESS OR OTHER LOCATION IDENTIFIER: 16510 West 119th Street

CITY: Olathe COUNTY: Johnson	**STATE: Kansas**	**ZIP: 66061**
TELEPHONE:	**FAX:**	

DIRECTIONS TO SITE: Intersection of Renner Boulevard and 119th Street.

II. PROJECT MANAGEMENT AND PROJECT INFORMATION:

PROJECT MANAGER: Randolph L. Brown	**PROJECT STAFF (List): Randolph L. Brown, Mike Costlow**
BRIEF SITE BACKGROUND DISCUSSION: Location of a construction company with a storage lot containing drums and containers.	**DISTRIBUTION LIST (Check as appropriate):** **X Unit Chief:** **X Project Manager:** **Project QC Officer (if not Project Manager):** **X Technicians (Specify all): Mike Costlow** **Other (Specify):**

PROJECT DESCRIPTION: This SSQA supplements the Generic QAPP for Integrated Site Assessment Activities of December, 1999, and includes documentation only for the specific site as indicated above. The SSQA is only intended or needed for sites with on-site sampling activity during integrated site assessment activities.

PROJECT TYPE: Preliminary Assessment (PA)

Quality Objectives and Criteria for Measurement Data:

Accuracy:	**X According to Generic Site Assessment QAPP**	**Identified in attached table**
Representativeness:	**X According to Generic Site Assessment QAPP**	**Identified in attached table**
Completeness:*	**X According to Generic Site Assessment QAPP**	**Identified in attached table**
Comparability:	**X According to Generic Site Assessment QAPP**	**Identified in attached table**

Completeness:
A completeness goal of _80_% has been established for this project. However, a site disposition may still be possible from the remaining valid data.

Special Training/Certification Requirements:
X OSHA 40-hour (HAZWOPER) X Geoprobe Operator X Drill Rig Operator X PID Field Analyst
In-Field XRF Operator (must be trained and certified, included in KDHE/BER Radiation License and approved by RSO)
Operator of Ludlum 2242 nuclear gauge Geophysical Equipment Operator

KDHE/BER SITE-SPECIFIC QAPP ADDENDUM FORM

III. DOCUMENTATION AND RECORDS PROPOSED FOR PROJECT:

(Check appropriate boxes):

X Field Analytical Sheets | X Log Book | X Photos
X Site Maps/Figures | X Chain-of-Custody | X Property Ownership Records
X District Notification Forms | X Utility Clearance Forms (contractor) | X Health and Safety Plan (contractor)

Other Documentation (Specify):
Proposed Schedule – March 2014 for completion of field work; report completion projected for completion by June 30, 2014.

IV. SAMPLING PROCESS DESIGN, METHODS, SAMPLE HANDLING, ETC.:

A. General Sampling Approach (Check all that apply):

Random Sampling | Transect Sampling | Systematic Random Sampling

Stratified Random Sampling | Search Sampling | Systematic Grid

B. Screening/Definitive Sampling (Check all that apply):

Screening without Definitive Confirmation

Screening With Definitive Confirmation
NOTE: Minimum Confirmation Rate of 5 % for All Field Analytical Screening Samples Collected

x Definitive Sampling

C. Biased/Judgemental Sampling: X Yes No (If Yes, the following applies):

The proposed sampling scheme will be judgemental in accordance with EPA=s *Guidance for Performing Site Inspections under CERCLA,* EPA/OSWER 9345.1-05, 1992, and *Removal Program Representative Sampling Guidance, Volume 1*, EPA/OSWER 93600.4-10, 1991. Judgemental sampling is the subjective (biased) selection of sampling locations based on available information, visual inspection, and the best professional judgement of the sampler. Soil and ground water sample locations will be selected to detect hazardous substances or pollutants or contaminants near suspected sites. Sample locations depicted in the site sketch are approximate and subject to change based on field conditions and data. The number of samples is approximate and subject to change based on site conditions and suspected source areas or size of impacted areas. The number of samples is a balance between cost and coverage and represents a reasonable attempt to meet study objectives while staying within the budget constraints of typical site assessment activities. Subsurface soil depths are selected to detect suspected subsurface releases and potentially identify source areas. Depth of Geoprobe samples is selected based on suspected depth to ground water and limitations of sampling equipment for conditions at the site. Actual depths may vary in the field based on field conditions encountered.

(If No, explain the alternate sampling rationale and approach):

Sample Methods Requirements (Specify all to be utilized):
Ground water: VOCs – 8260; Total Petroleum Hydrocarbons – OA-1, OA2; Soil – VOCs, OA-2, Metals – 6010/7471;

Matrix:	KDHE SOPs:	Sampling Equipment Proposed:
1. Ground Water	BER-01	Dedicated bailers
2. Subsurface Soil	BER-03	Geoprobe, PID

KDHE/BER SITE-SPECIFIC QAPP ADDENDUM FORM

Sample Handling and Custody Requirements (Check appropriate box):

X In accordance with Generic QAPP and SOPs Other (specify):

Analytical Methods Requirements (Check appropriate box):

Identified in Attached Table X Identified Below (Describe):
VOCs - EPA Method SW-846 (8260); TPH Methods OA-1 and OA-2; Metals by EPA Methods 6010 and 7471.

Quality Control Requirements (Check appropriate box):

Not Applicable X In accordance with Generic QAPP Specific requirements (state):

Describe Field QC Samples to be collected:
Trip blank for VOCs.

Instrument/Equipment Testing, Inspection and Maintenance Requirements (Check appropriate box):

Not Applicable X In accordance with Generic QAPP Specific requirements (state):

Describe instrument/equipment, etc. proposed for use in this project subject to the above requirements:
PID.

Inspection/Acceptance Criteria for Supplies and Consumables (Check appropriate box):

Not Applicable X In accordance with Generic QAPP Specific requirements (state):

Data Acquisition Requirements (Check appropriate box):

X In accordance with Generic QAPP Specific requirements (state):

Data Management (Check appropriate box):

X In accordance with Generic QAPP Specific requirements (state):

Assessment and Response Actions (Check appropriate box):

X In accordance with Generic QAPP Specific requirements (state):

Corrective Action (Check appropriate box):

X In accordance with Generic QAPP Specific requirements (state):

Assessment Reporting (Check appropriate box):

X In accordance with Generic QAPP Specific requirements (state):

KDHE/BER SITE-SPECIFIC QAPP ADDENDUM FORM

V. DATA VALIDATION AND USABILITY:

(Check appropriate box):

X Data review and verification will be performed in by Project Manager or QC officer delegate in accordance with Generic QAPP, with data validation conducted according to BER-11 and Generic QAPP

Data review, validation and verification will be perfomed as follows with data validation conducted according to alternate methods (describe):

Field analysis utilized? Yes ___ No _X__ (If yes, memorandum, field analytical sheets, etc. from field analyst should be reviewed by Project Manager/Site QC Officer after completion of field analysis).

VI. RECONCILIATION WITH USER REQUIREMENTS:

X In accordance with Generic QAPP **Specific requirements (state):**

VII. SIGNATURES/APPROVAL:

Randolph L. Brown		02/24/14
Project Manager Name	**Signature**	**Date**
Randolph L. Brown		02/24/14
Unit Chief	**Signature**	**Date**

Randy Brown

From: ks@occinc.com
Sent: Thursday, February 20, 2014 11:43 AM
To: Randy Brown
Subject: Ticket: 14052704

Kansas One Call
Ticket No: 14052704 STANDARD NEW

Send To: C_EMAIL Seq No: 541 Map Ref:

Transmit Date: 2/20/14 Time: 11:42 AM Op: webusr
Original Call Date: 2/20/14 Time: 11:29 AM Op: webusr
Work to Begin Date: 2/25/14 Time: 8:15 AM

Company : KS DEPT OF HEALTH/ENVIRONMENT Best Time: 8 - 5
Caller Name : RANDY BROWN Phone: (785)296-8065
Alt. Contact: SAME Phone: (785)296-8065
Caller Address: 1000 SW JACKSON Fax Phone: (785)296-7030
TOPEKA, KS 66612

Email Address: rbrown@kdheks.gov
Type of Work: SOIL BORINGS

Explosives: N Duration: ONE WEEK Trenchless Ex.: Y
Work Being Done For: KDHE

State: KS County: JOHNSON Place: OLATHE
Address: 16510 Street: WEST 119TH STREET
Nearest Intersecting Street: RENNER BOULEVARD

Location of Work: MARK ABOVE ADDRESS. WORK WILL TAKE PLACE THROUGHOUT THE
: ABOVE ADDRESS.

Remarks:

Twp: 13S Rng: 24E Sect-Qtr: 20-NW,19-NE,18-SE,17-SW MP: N
Twp: Rng: Sect-Qtr:
Caller Lat: Lon: Zone: Nad:
Map NW Lat: 38.914786 Lon: -94.779471 SE Lat: 38.912808 Lon: -94.775877

Kansas One-Call will notify the following underground facility operator(s):
DISTRICT COMPANY NAME PHONE NUMBER
ACSI01 TW TELECOM (800)778-9140
AMRFIS01 AMERICAN FIBER SYSTEMS (801)364-1063
ATMOLA01 ATMOS ENERGY (866)322-8667
ATT01 ATT TRANSMISSION (800)852-3786
ATT301 ATT DISTRIBUTION (866)861-7678
CMCST11 COMCAST CABLE (800)778-9140

JOCOWW01 JOHNSON CO WASTE WTR (800)778-9140
KCPL01 KCP&L (800)778-9140
MCI01 MCI (800)289-3427
OLATHE01 C/OLATHE-TRAFFIC DPT (913)971-9045
TWCBL02 TIME WARNER CABLE (800)778-9140

IMPORTANT INFORMATION-
You are responsible for contacting the following underground facility operator(s) directly using the contact information provided:

DISTRICT	COMPANY NAME	BUSINESS HOURS	AFTER HOURS
OLATHE02	CITY OF OLATHE	(913)971-9311	(913)971-9311

IMPORTANT NOTES: YOU MUST CONTACT ANY OTHER UTILITIES DIRECTLY.
The notified facility/utility operators will not mark privately owned underground lines. These include, but are not limited to, power or electric services, water and sewer pipes from the meter to building/s, invisible fencing, sprinkler systems, well and septic systems, etc. Some utility companies will locate private utility lines if requested. Please contact the property owner or local utility company directly for details.

Link To Map for C_EMAIL: http://ks.itic.occinc.com/4PAD-6DH-82R-2K2